

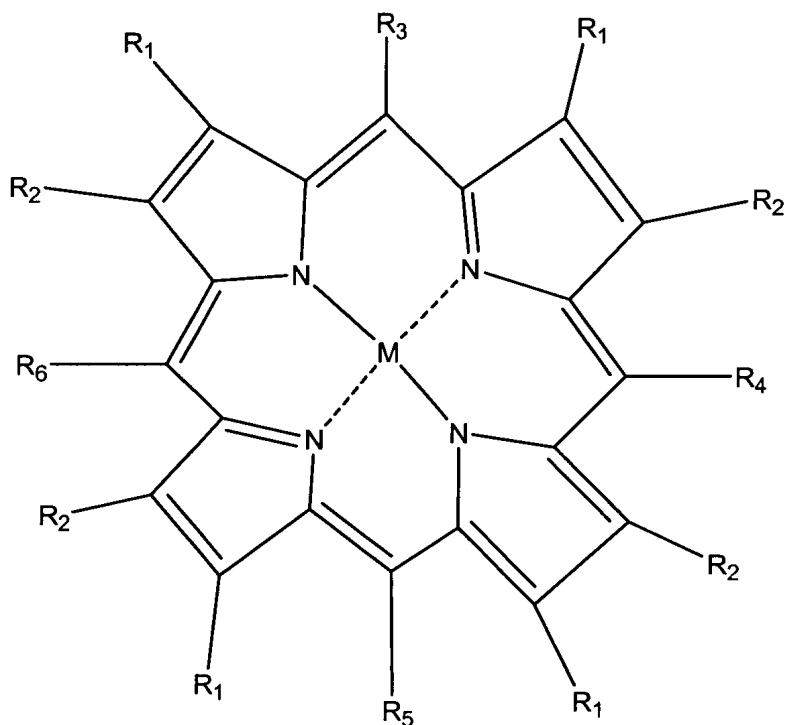
## **Appendix A – Pending Claims**

(For convenience of reference; no new amendments are presented)

**1.** (previously presented) A method for treating a human immunodeficiency virus infection in a human patient, said method comprising administering to the patient an effective amount of a compound comprising a porphyrin macrocycle, and further comprising one or more carboranyl groups that are linked to the porphyrin macrocycle by carbon-carbon bonding.

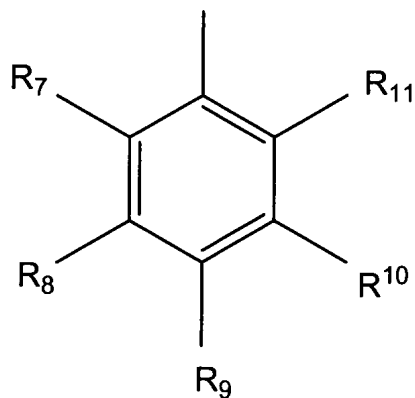
**2 -3** (canceled)

4. (original) A method as recited in Claim 1, wherein the compound has structure I:



I

wherein M is 2H or a metal ion; R<sub>1</sub> and R<sub>2</sub> are each independently hydrogen, C<sub>1</sub> to C<sub>4</sub> alkyl or hydroxyalkyl; and R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> are each independently hydrogen, phenyl, or substituted phenyl having structure II:



II

wherein R7, R8, R9, R10, and R11 are independently hydrogen or a carboranyl group, wherein such a carboranyl group is linked to the phenyl group by a carbon-carbon bond; and wherein one or two of R7, R8, R9, R10, and R11 are hydrogen, halide, hydroxide, alkoxide, sulfonate, or a substituted or unsubstituted alkyl or aryl; or such a carboranyl group; and

wherein at least one of R3, R4, R5, and R6 is a substituted phenyl having structure II and having at least one such a carboranyl group.

5. (original) A method as recited in Claim 4, wherein at least two of R3, R4, R5, and R6 are substituted phenyls having structure II and each having at least one such a carboranyl group.

6. (withdrawn) A method as recited in Claim 4, wherein each of R3, R4, R5, and R6 is a substituted phenyl having structure II and each having at least one such a carboranyl group.

7. (original) A method as recited in Claim 4, wherein at least two of R3, R4, R5, and R6 are substituted phenyls having structure II and each having at least one such a carboranyl group.

8. (previously presented) A method as recited in Claim 1, additionally comprising the step of exposing tissue of the patient to light having a wavelength, intensity, and duration sufficient to significantly enhance the compound's treatment of viral infection.

9. (previously presented) A method as recited in Claim 1, wherein the compound is selected from the group consisting of Compounds **4, 6, 10, 12, 16, 18, 22, 24, 31, and 33**, as depicted in Figures 1, 2, 3, 4, and 6.

**10.** (withdrawn) A method as recited in Claim 1, wherein the compound is Compound **16**.

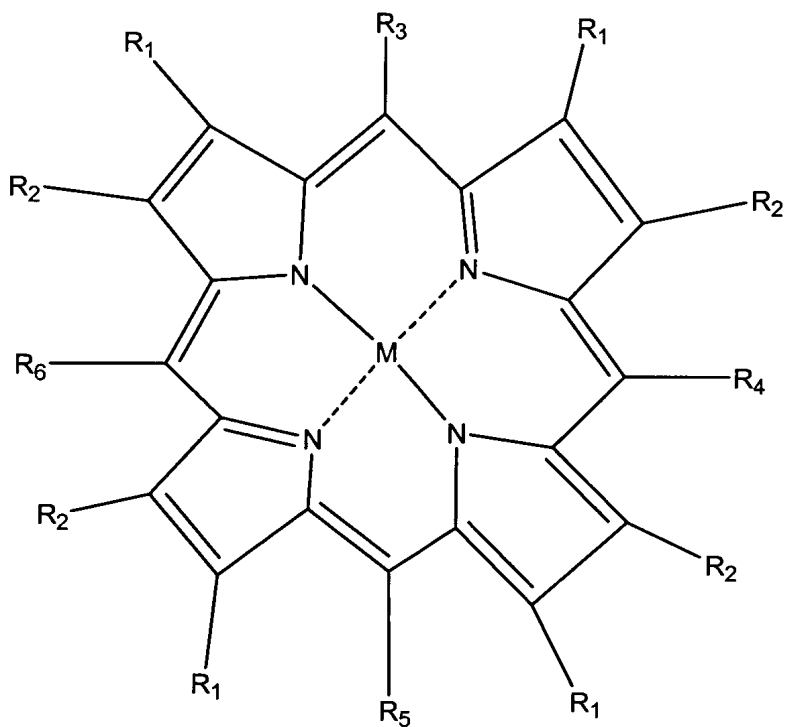
**11.** (withdrawn) A method as recited in Claim 1, wherein the compound is Compound **31**.

**12.** (original) A method as recited in Claim 1, wherein the compound is Compound **33**.

**13.** (previously presented, and withdrawn) A method for killing the human immunodeficiency virus in or on a nonliving material, said method comprising treating the material with an effective amount of a compound comprising a porphyrin macrocycle, and further comprising one or more carboranyl groups that are linked to the porphyrin macrocycle by carbon-carbon bonding.

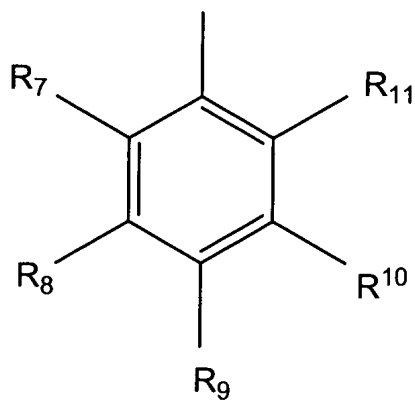
**14.** (canceled)

15. (original) A method as recited in Claim 13, wherein the compound has structure I:



I

wherein  $M$  is  $2H$  or a metal ion;  $R_1$  and  $R_2$  are each independently hydrogen,  $C_1$  to  $C_4$  alkyl or hydroxyalkyl; and  $R_3$ ,  $R_4$ ,  $R_5$ , and  $R_6$  are each independently hydrogen, phenyl, or substituted phenyl having structure II:



II

wherein R7, R8, R9, R10, and R11 are independently hydrogen or a carboranyl group, wherein such a carboranyl group is linked to the phenyl group by a carbon-carbon bond; and wherein one or two of R7, R8, R9, R10, and R11 are hydrogen, halide, hydroxide, alkoxide, sulfonate, or a substituted or unsubstituted alkyl or aryl; or such a carboranyl group; and

wherein at least one of R3, R4, R5, and R6 is a substituted phenyl having structure II and having at least one such a carboranyl group.

**16.** (original) A method as recited in Claim 15, wherein at least two of R3, R4, R5, and R6 are substituted phenyls having structure II and each having at least one such a carboranyl group.

**17.** (withdrawn) A method as recited in Claim 15, wherein each of R3, R4, R5, and R6 is a substituted phenyl having structure II and each having at least one such a carboranyl group.

**18.** (original) A method as recited in Claim 15, wherein at least two of R3, R4, R5, and R6 are substituted phenyls having structure II and each having at least one such a carboranyl group.

**19.** (previously presented) A method as recited in Claim 13, additionally comprising the step of exposing the material to light having a wavelength, intensity, and duration sufficient to significantly enhance the compound's killing of viruses.

**20.** (previously presented) A method as recited in Claim 13, wherein the compound is selected from the group consisting of Compounds **4, 6, 10, 12, 16, 18, 22, 24, 31, and 33**, as depicted in Figures 1, 2, 3, 4, and 6.

**21.** (withdrawn) A method as recited in Claim 13, wherein the compound is Compound **16**.

**22.** (withdrawn) A method as recited in Claim 13, wherein the compound is Compound **31**.

**23.** (original) A method as recited in Claim 13, wherein the compound is Compound **33**.